CLAIMS

1. A method of approximating the relative contribution of melanin responsible for the perceived pigmentation of an area of skin, said method comprising the steps of (i) determining the absorbance of light at a wavelength of from about 620 nm to about 750 nm at said area of skin and (ii) subtracting the approximate relative contribution of deoxy-hemoglobin from said absorbance.

2. A method of claim 1, wherein said method comprises determining said absorbance of light at least two different wavelengths, wherein said wavelengths are from about 620 nm to about 750 nm.

3. A method of claim 1, wherein the approximate relative contribution of deoxy-hemoglobin is determined by determining the absorbance of light at a wavelength from about 550 nm to about 590 nm at said area of skin.

4. A method of claim 2, wherein the approximate relative contribution of deoxy-hemoglobin is determined by determining the absorbance of light at a wavelength from about 550 nm to about 590 nm at said area of skin.

5. A method of approximating the relative contribution of deoxy-hemoglobin responsible for the perceived pigmentation of an area of skin, said method comprising the steps of (i) determining the absorbance of light at a wavelength of from about 550 nm to about 590 nm at said area of skin and (ii) subtracting the approximate

relative contribution of oxy-hemoglobin and melanin from said absorbance.

6. A method of claim 5, wherein said method comprises determining said absorbance of light at least two different wavelengths, wherein said wavelengths are from about 550 nm to about 590 nm.

7. A method of claim 5, wherein the approximate relative contribution of melanin is determined by determining the absorbance of light at a wavelength from about 620 nm to about 750 nm at said area of skin.

8. A method of claim 6, wherein the approximate relative contribution of melanin is determined by determining the absorbance of light at a wavelength from about 620 nm to about 750 nm at said area of skin.

9. A method of approximating the relative amount of melanin responsible for the perceived pigmentation of an area of skin, said method comprising the steps of:

(i) measuring the reflectance of a first light at a wavelength of from about 555 nm to about 565 nm, a second light at a wavelength of from about 570 nm to about 585 nm, a third light at a wavelength of from about 620 nm to about 650 nm, and a fourth light at a wavelength of from about 680 nm to about 750 nm at said area of skin;

(ii) determining the first approximate relative contribution of melanin to such perceived pigmentation by determining the absorbance of said third light and said fourth light at said area of skin;

(iii) subtracting said first approximate relative contribution of melanin from the determined absorbance of said first light and said second light at said area of skin;

(iv) determining the first approximate relative contribution of deoxy-hemoglobin from the recalculated absorbance of said first light and said second light of step (iii); and

(v) subtracting the first approximate relative contribution of deoxy-hemoglobin from said first approximate relative contribution of melanin to obtain a final approximate relative contribution of melanin.

10. A method of approximating the relative amount of deoxy-hemoglobin responsible for the perceived pigmentation of an area of skin, said method comprising the steps of:

(i) measuring the reflectance of a first light at a wavelength of from about 555 nm to about 565 nm, a second light at a wavelength of from about 570 nm to about 585 nm, a third light at a wavelength of from about 620 nm to about 650 nm, and a fourth light at a wavelength of from about 680 nm to about 750 nm at said area of skin;

(ii) determining the first approximate relative contribution of melanin to such perceived pigmentation by determining the absorbance of said third light and said fourth light at said area of skin;

(iii) subtracting said first approximate relative contribution of melanin from the determined absorbance of said first light and said second light at said area of skin; and

(iv) determining the first approximate relative contribution of deoxy-hemoglobin from the recalculated absorbance of said first light and said second light of step (iii).

11. A method of approximating the relative contribution of melanin to a perceived pigmentation of an area of skin, said method comprising the steps of:

(i) examining said area of skin with a device comprising a light source and a reflectance detector, wherein said detector measures the reflectance from said area of skin of light generated by said light source of at a first wavelength of from about 555 nm to about 565 nm, at a second light wavelength of from about 570 nm to about 585 nm, at a third wavelength of from about 620 nm to about 650 nm, and at a fourth wavelength of from about 680 nm to about 750 nm at said area of skin,

(ii) determining the first approximate relative contribution of melanin to such perceived pigmentation by using the calculated absorbance of said third wavelength and said fourth wavelength at said area of skin; and

(iii) further determining the approximate relative contribution of melanin by subtracting from said first approximate relative contribution of melanin the approximate relative contribution of deoxy-hemoglobin determined by the absorbance of said first wavelength and said second wavelength at said area of skin.

12. A method of approximating the relative contribution of deoxy-hemoglobin to a perceived pigmentation of an area of skin, said method comprising the steps of:

(i) examining said area of skin with a device comprising a light source and a reflectance detector, wherein said detector measures the reflectance from said area of skin of light generated by said light source of at a first wavelength of from about 555 nm to about 565 nm, at a second light wavelength of from about 570 nm to about 585 nm, at a third wavelength of from about 620 nm to about 650 nm, and at a fourth wavelength of from about 680 nm to about 750 nm at said area of skin;

(ii) determining the approximate relative contribution of melanin to such perceived pigmentation by using the calculated absorbance of said third wavelength and said fourth wavelength at said area of skin; and

(iii) determining the approximate relative contribution of deoxy-hemoglobin by subtracting said first approximate relative contribution of melanin from the calculated absorbance value at said first wavelength and said second wavelength.

13. A method of claim 11, wherein said device comprises a filter device such that the light emitted from said light source is filtered to said first wavelength, said second wavelength, said third wavelength, and said fourth wavelength.

14. A method of claim 12, wherein said device comprises a filter device such that the light emitted from said light source is filtered to said first wavelength, said second wavelength, said third wavelength, and said fourth wavelength.

15. A method of claim 11, wherein said device comprises a filter such that the light reflected from said area of skin is filtered to the said wavelength, said second wavelength, said third wavelength, and said fourth wavelength prior to measurement by said reflectance detector.

16. A method of claim 12, wherein said device comprises a filter such that the light reflected from said area of skin is filtered to the said wavelength, said second wavelength, said third wavelength, and said fourth wavelength prior to measurement by said reflectance detector.

17. A method of claim 11, wherein said reflectance detector is a spectrometer.

18. A method of claim 12, wherein said reflectance detector is a spectrometer.

19. A method of claim 11, wherein said reflectance detector is camera.

20. A method of claim 12, wherein said reflectance detector is camera.

21. A method of claim 19, wherein said method is conducted at a plurality of areas of the skin where the absorbances at such areas of skin are determined from the pixels obtained by said camera.

22. A method of claim 20, wherein said method is conducted at a plurality of areas of the skin where the absorbances at such areas of skin are determined from the pixels obtained by said camera.

23. A method of claim 21, wherein said relative contribution of melanin is at said areas of skin is represented as an image of such areas of skin.

24. A method of claim 22, wherein said relative contribution of deoxy-hemoglobin at said areas of skin is represented as an image of such areas of skin.